

Notice of Allowability

Application No.

10/655,145

Examiner

Janet L. Coppins

Applicant(s)

VEDAGE ET AL.

Art Unit

1626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Applicants' Amendment of 9/25/07.
2. ☒ The allowed claim(s) is/are 1-22.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

DETAILED ACTION

Claims 1-22 are pending in the instant application.

Response to Amendment

1. Applicant's Amendment and Response, submitted September 25, 2007 has been reviewed by the Examiner. Accordingly, claim 1 has been amended, and paragraph 0019 at page 5 of the specification has been amended.

Claim Rejections - 35 USC § 102

2. Claims 1-8, 11-15 and 20-22 previously rejected under 35 U.S.C. 102(b) as being anticipated by U.S. 5,075,507 to Carr et al. Applicant has amended claim 1 in order to specify that removal of the residual acrylonitrile must be achieved by use of an amide or ether solvent and not an alcohol solvent, as taught by Carr et al. In view of Applicants' amendments in order to differentiate the instant process from the prior art process, the rejections have been obviated and are withdrawn.

Claim Objections

3. Claims 9, 10, and 16-19 previously objected to as being dependent on a rejected base claim. In view of Applicants' amendments to overcome the anticipation rejections, the above-mentioned claims are allowable and the objections are withdrawn.

EXAMINER'S AMENDMENT

4. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

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The application has been amended as follows:

- A) Claim 6, line 2, please delete the duplicate of "ethanol" (before the term "propanol").
- B) Claim 19, line 2, please delete the duplicate of "ethanol" (before the term "propanol").

Allowable Subject Matter

5. In view of applicants' amendatory changes and the Examiner's Amendment, claims 1-22 are now allowable over the prior art.

Reasons for Allowance

6. The following is an examiner's statement of reasons for allowance: claims 1-22, directed to a hydrogenation process for the preparation of etheramines, specifically cyanoethylethers, are allowable.

This invention relates to an improvement in a hydrogenation process of cyanoethylethers, wherein unreacted byproduct (acrylonitrile) is solubilized with an amide or ether solvent. Certain hydrogenation processes are known in the art, and often encounter problems such as loss of catalyst activity and product selectivity. However the aspect of the instant claimed process, with the improvement of solubilizing unreacted byproduct with an amide or ether solvent, is novel and unobvious. After a thorough search, the closest of prior art, U.S. Pat. No. 10/655,145 to Niedballa, et al. was found to teach a similar hydrogenation process of cyanoethylated glycol. However the '145 patent fails to teach or render obvious the instant claimed hydrogenation process, and does not fairly suggest the improvement wherein an amide or ether solvent is utilized to solubilize the unreacted acrylonitrile byproduct.

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Telephone Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Janet L. Coppins whose telephone number is 571.272.0680. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph K. McKane can be reached on 571.272.0699. The fax phone number for the organization where this application or proceeding is assigned is 571.272.8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Janet L. Coppins
December 22, 2007

KAMAL A. SAEED, Ph.D.
PRIMARY EXAMINER

Joseph K. McKane
SPE, Art Unit 1626